

Randy Hogue
Hogue Enterprises, Inc.
55851 East Avenue
Mishawaka, IN 46545

October 18, 2000

Re: Registered Operation Status,
141-12646-00197

Dear Mr. Hogue:

The application from Hogue Enterprises, Inc., received on August 21, 2000, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following conversion vans exterior painting and detailing facility, to be located at 55851 East Avenue Mishawaka, Indiana, is classified as registered:

- (a) One (1) natural gas make up air unit, identified as H1, and rated at 0.650 million British thermal units per hour (MMBtu/hr);
- (b) One (1) natural gas heater unit, identified as H2, and rated at 0.092 MMBtu/hr;
- (c) One (1) natural gas heater unit, identified as H3, and rated at 0.080 MMBtu/hr;
- (d) One (1) natural gas furnace unit, identified as H4, and rated at 0.080 MMBtu/hr;
- (e) One (1) paint room, identified as S1, with dry filters as particulate control, and exhausting to stack S1; and
- (f) One (1) clear coat booth, identified as S2, with dry filters as particulate control, and exhausting to stack S2.

The following conditions shall be applicable:

- (a) Pursuant to 326 IAC 2-6 (Emission Reporting) the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year). The annual statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name: Hogue Enterprises, Inc.
Source Location: 55851 East Avenue Mishawaka, Indiana 46545
County: St. Joseph
SIC Code: 7549
Operation Permit No.: 141-12646-00197
Permit Reviewer: Lisa M. Wasiowich/EVP

The Office of Air Management (OAM) has reviewed an application from Hogue Enterprises, Inc. relating to the construction and operation of a facility for exterior painting/detailing of conversion vans.

Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (a) One (1) natural gas make up air unit, identified as H1, and rated at 0.650 million British thermal units per hour (MMBtu/hr);
- (b) One (1) natural gas heater unit, identified as H2, and rated at 0.092 MMBtu/hr;
- (c) One (1) natural gas heater unit, identified as H3, and rated at 0.080 MMBtu/hr;
- (d) One (1) natural gas furnace unit, identified as H4, and rated at 0.080 MMBtu/hr;
- (e) One (1) paint room, identified as S1, with dry filters as particulate control, and exhausting to stack S1; and
- (f) One (1) clear coat booth, identified as S2, with dry filters as particulate control, and exhausting to stack S2.

Existing Approvals

There are no existing approvals for this source.

Appendix A: Emission Calculations

Company Name: Hogue Enterprises
Address City IN Zip: 55851 East Avenue Mishawaka, IN 46545
CP: 141-12646
Plt ID: 141-00197
Reviewer: Lisa M. Wasiowich
Date: September 11, 2000

Uncontrolled Potential Emissions (tons/year)			
Emissions Generating Activity			
Pollutant	Natural Gas Combustion	Surface Coating	TOTAL
PM	0.01	8.79	8.8
PM10	0.03	8.79	8.8
SO2	0.00	0.00	0.0
NOx	0.39	0.00	0.4
VOC	0.02	18.92	18.9
CO	0.33	0.00	0.3
total HAPs	0.01	17.23	17.2
worst case single HAP	0.01	6.28	6.3
Total emissions based on rated capacity at 8,760 hours/year.			
Controlled Potential Emissions (tons/year)			
Emissions Generating Activity			
Pollutant	Natural Gas Combustion	Surface Coating	TOTAL
PM	0.01	0.44	0.4
PM10	0.03	0.44	0.5
SO2	0.00	0.00	0.0
NOx	0.39	0.00	0.4
VOC	0.02	18.92	18.9
CO	0.33	0.00	0.3
total HAPs	0.01	17.23	17.2
worst case single HAP	0.01	6.28	6.3
Total emissions based on rated capacity at 8,760 hours/year, after control.			

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Nai Hogue Enterprises
Address City 55851 East Avenue Mishawaka, IN 46545
CP: 141-12646
Plt ID: 141-00197
Reviewer: Lisa M. Wasiowich
Date: September 11, 2000

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Lb VOC/gal solids	Transfer Efficienc y
Specialty Clear (Sealer)	7.1	94.22%	0.0%	94.2%	0.0%	4.90%	0.07700	0.458	6.65	6.65	0.23	5.63	1.03	0.06	135.75	0%
BC Bases (Worst Case)	9.5	64.41%	0.0%	64.4%	0.0%	35.59%	0.75000	0.458	6.10	6.10	2.10	50.32	9.18	5.07	17.14	0%
Diamond Speed Dry Clear	7.9	69.80%	0.0%	69.8%	0.0%	30.20%	0.50000	0.458	5.50	5.50	1.26	30.25	5.52	2.39	18.21	0%
Rapid HS Hardener	8.8	28.38%	0.0%	28.4%	0.0%	71.62%	0.10000	0.458	2.50	2.50	0.11	2.75	0.50	1.27	3.49	0%
Reducer	7.4	99.97%	0.0%	100.0%	0.0%	0.03%	0.18000	0.458	7.42	7.42	0.61	14.69	2.68	0.00	24725.91	0%

State Potential Emissions	Add worst case coating to all solvents	4.32	103.64	18.92	8.79
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METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emission Calculations
HAP Emission Calculations

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Company Nan Hogue Enterprises
Address City 155851 East Avenue Mishawaka, IN 46545
CP#: 141-12646
Pit ID: 141-00197
Permit Review Lisa M. Wasiowich
Date: September 11, 2000

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene	Weight % Petroleum Naptha	Weight % Tolulene	Weight % Xylene	Weight % MIK	Weight % Glycol Ethers	Weight % MEK	Ethyl Benzene Emission s (ton/yr)	Petroleum Naptha Emissions (ton/yr)	Tolulene Emissions (ton/yr)	Xylene Emission s (ton/yr)	MIK Emission s (ton/yr)	Glycol Ethers Emissions (ton/yr)	MEK Emissions (ton/yr)
Specialty Clear (Sealer)	7.06	0.077000	0.46	4.00%	35.00%	35.00%	15.00%	0.00%	0.00%	0.00%	0.04	0.38	0.38	0.16	0.00	0.00	0.00
BC Bases (Worst Case)	9.47	0.750000	0.46	7.00%	0.00%	0.00%	34.00%	42.00%	2.00%	0.00%	1.00	0.00	0.00	4.85	5.99	0.29	0.00
Diamond Speed Dry Clear	7.88	0.500000	0.46	3.00%	0.00%	17.00%	16.00%	0.00%	0.00%	3.00%	0.24	0.00	1.34	1.27	0.00	0.00	0.24
Rapid HS Hardener	8.81	0.100000	0.46	0.00%	0.00%	14.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Reducer	7.42	0.180000	0.46	0.00%	0.00%	30.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.80	0.00	0.00	0.00	0.00
Total State Potential Emissions											1.28	0.38	2.78	6.28	5.99	0.29	0.24

METHODOLOGY

Total 17.23

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: Hogue Enterprises
Address City: 55851 East Avenue Mishawaka, IN 46545
CP: 141-12646
Plt ID: 141-00197
Reviewer: Lisa M. Wasiowich
Date: September 11, 2000

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

0.902

7.8

Pollutant						
Emission Factor in lb/MMCF	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.0	0.0	0.0	0.4	0.0	0.3

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

heat input capacity includes one (1) natural gas make up air unit rated at 0.650 MMBtu/hr, one (1) natural gas heater unit rated at 0.092 MMBtu/hr, one (1) natural gas heater unit rated at 0.080 MMBtu/hr, and one (1) natural gas furnace unit rated at 0.080 MMBtu/hr

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,012 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler
HAPs Emissions

Page 5 of 5 TSD App A

Company Name: Hogue Enterprises
Address: 55851 East Avenue Mishawaka, IN 46545
CP: 141-12646
Plt ID: 141-00197
Reviewer: Lisa M. Wasiowich
Date: September 11, 2000

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03	
Potential Emission in tons/yr	8.198E-06	4.685E-06	2.928E-04	7.027E-03	1.327E-05	7.346E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	
Potential Emission in tons/yr	1.952E-06	4.294E-06	5.465E-06	1.483E-06	8.198E-06	2.139E-05

Methodology is the same as page 1.

Total 7.367E-03

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
G/V	Drying Room	6	2	9000	ambient
S-1	Paint Room	28	2.5	12000	70
S-2	Clear Coat Booth	10	2	9000	70

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on August 21, 2000.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 5)

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	8.8
PM-10	8.8
SO ₂	0.0
VOC	18.9
CO	0.3
NO _x	0.4

HAP's	Potential To Emit (tons/year)
Ethyl Benzene	1.28
Petroleum Naptha	0.38
Tolulene	2.78
Xylene	6.28
MIK	5.99
Glycol Ethers	0.29
MEK	0.24
Benzene	8.198 E -6
Dichlorobenzene	4.685 E -6
Formaldehyde	2.928 E -4
Hexane	7.027 E -3
Lead	1.952 E -6
Cadmium	4.294 E -6
Chromium	5.465 E -6
Manganese	1.483 E -6
Nickel	8.198 E -6
TOTAL	17.2

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of particulate matter is greater than 5 tons per year but less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of volatile organic compounds is greater than 10 tons per year but less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of and single HAP is less than 10 tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less then 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

No previous emission data has been received from the source.

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
natural gas combustion	0.1	0.03	0.0	0.02	0.33	0.39	0.01
surface coating	0.44	0.44	0.0	18.92	0.0	0.0	17.23
Total Emissions	0.4	0.5	0.0	18.9	0.3	0.4	17.2

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	maintenance
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	0.4
PM10	0.5
SO ₂	0.0
VOC	18.9
CO	0.3
NO _x	0.4

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the registration application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit CP-141-12646-00197, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAM inspector assigned to the source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.

40 CFR Part 60.390, Subpart MM (Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations)

The provisions of 40 CFR Part 60.390, Subpart MM are not applicable to this modification. This rule applies to affected facilities in an automobile or light-duty truck assembly plant. This source does not assemble automobiles or light-duty trucks, therefore, the requirements of 40 CFR Part 60.390, Subpart MM do not apply.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 61) applicable to this source.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 20 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-4-1.1 (New Source Toxics Control)

This source is not subject to the provisions of 326 IAC 2-4-1.1 (New Source Toxics Control), because it is not a major source of hazardous air pollutants.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and is located in St. Joseph County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the surface coating operation and the shall each be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The dry filters shall be used at all times the surface coating process is in operation, in order to comply with this limit.

326 IAC 8-1-6 (BACT)

This source is not subject to the provisions of 236 IAC 8-1-6 (BACT), because the potential to emit of VOC is less than 25 tons per year.

326 IAC 8-2-2 (Automobile and Light Duty Truck Coating Operations)

The paint spray booths are not subject to 326 IAC 8-2-2. This rule applies to automobile or light duty truck surface coating operations at an automobile or light duty truck assembly plant. Since this source does not assemble automobiles or light duty trucks, the requirements of 326 IAC 8-2-2 do not apply.

Conclusion

The operation of this facility for exterior painting/detailing of conversion vans shall be subject to the conditions of the attached proposed **Registration No. CP-141-12646, Plt ID No. 141-00197**

- (b) Pursuant to 326 IAC 6-3 (Process Operations), the following shall apply to the paint room and the clear coat booth:
- (1) The dry filters for particulate matter overspray control shall be in operation at all times when the paint room and the clear coat booth are in operation.
 - (2) The paint spray booths shall comply with 326 IAC 6-3-2(c) using the following equation:
$$E = 4.10P^{0.67}$$
 where: E = rate of emission in pounds per hour,
P = process weight in tons per hour.
- (c) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Management that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3)). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

LMW/EVP

cc: File - St. Joseph County
St. Joseph County Health Department
Air Compliance - Rick Reynolds
Northern Regional Office
Permit Tracking - Janet Mobley
Air Programs Section- Michelle Boner
Office of Enforcement

Registration Annual Notification

This form should be used to comply with the notification requirements under 326 IAC 2-5.5-4(a)(3)

Company Name:	Hogue Enterprises, Inc.
Address:	55851 East Avenue
City:	Mishawaka
Authorized individual:	Randy Hogue
Phone #:	219-256-1945
Registration #:	141-12646-00197

I hereby certify that Hogue Enterprises, Inc. is still in operation and is in compliance with the requirements of Registration **141-12646-00197**.

Name (typed):
Title:
Signature:
Date: